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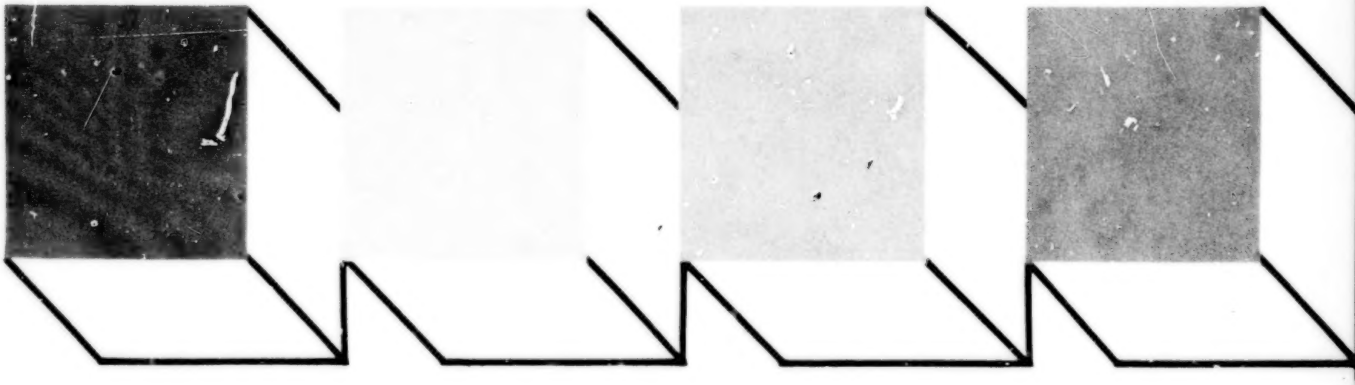
Program Announcement

Information Dissemination for Science Education

guide for
the preparation of proposals and
project and award management



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Closing Date: January 10, 1979

NATIONAL SCIENCE FOUNDATION
Division of Science Education Resources Improvement
Washington, D.C. 20550

Those individuals planning to submit proposals in the FY 1979 competition are requested to return an intent-to-submit card (see rear cover of this announcement) as soon as possible. This will assist the Foundation in preparing for an adequate and appropriate review, but does not represent a commitment by the institution to submit a proposal. Use this announcement *ONLY* for the preparation of Fiscal Year 1979 proposals due in the Foundation on January 10, 1979.

Mailing Address for Inquiries:

Information Dissemination for Science Education Program
Division of Science Education Resources Improvement
Directorate for Science Education
National Science Foundation
Washington, D.C. 20550

INFORMATION DISSEMINATION FOR SCIENCE EDUCATION PROGRAM HISTORY FISCAL YEAR 1977 & 1978

	1977	*1978*
Total Number of Proposals Submitted....	82	126
Total Dollars Requested	$1,780,000	$2,820,000
Total Funds Awarded	$353,100	$695,042

SPECIAL NOTE

Experimental Projects for Science Education Resources Improvement

IDSE and related programs of the Division of Science Education Resources Improvement (SERI) support a variety of activities designed to strengthen science education and research training in schools, colleges, and universities. From time to time, however, proposals or inquiries are received about potential projects that do not fully meet the requirements for existing programs, or, in some cases, overlap two or more programs.

The Division will entertain such proposals if the project:

1. Relates to the broad objectives of the Division;
2. Falls outside the guidelines of existing SERI programs; and
3. Shows promise for providing information and experience useful to the Division in improving the effectiveness of existing programs or in designing new programs.

Proposals meeting these criteria will be considered individually and may be submitted at any time. Prospective applicants must establish initial contact with the Division staff by phone or by a brief letter of inquiry that describes the intended project. Discussion may be initiated by contacting the IDSE or other SERI program offices or by writing to:

Experimental Projects
Division of Science Education Resources Improvement
National Science Foundation
Washington, D.C. 20550
(Telephone: 202-282-7777)

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GUIDE FOR PREPARATION OF PROPOSALS AND PROJECT AND AWARD MANAGEMENT

INFORMATION DISSEMINATION FOR SCIENCE EDUCATION

I. GENERAL INFORMATION

INTRODUCTION

The National Science Foundation, through the Division of Science Education Resources Improvement, supports programs and activities aimed at strengthening the capabilities of elementary and secondary schools, as well as colleges and universities, for the improvement of science and mathematics education.

The primary purpose of the Information Dissemination for Science Education Program is to encourage improvements in elementary and secondary school science, mathematics and social science by providing opportunities for school-system representatives and others concerned with education at the pre-college level to learn about new and alternative instructional materials, classroom practices and recent science education research findings. The dissemination program activities are aimed at assisting state and local authorities to acquire information about materials and practices necessary to meet locally-determined needs in science education through such mechanisms as conferences, professional meetings and computerized exchanges. The target audiences for these activities are education decision-makers such as principals, supervisors, teacher-leaders, school board members and representatives of parent groups.

DEFINITION

For the purpose of this program, Information Dissemination activities can be classified into three related categories: spread, exchange and choice.

Spread: the one-way transmission of information on products, ideas and materials.

Exchange: the two-way, or multi-way, flow of information on products, ideas, and materials relating to needs, problems and potential solutions.

Choice: the facilitation of rational means of considering and selecting among ideas, materials and educational practices.

It is not the intent of this program to improve the content background of teachers or to provide on-site technical assistance to teachers in the implementation or the utilization of specific curricular materials, practices or technologies.

PROGRAM OBJECTIVES

The Information Dissemination program is concerned with bridging the gap which exists between educational product developers and users and is directed toward science education at the elementary and secondary school levels. The last decade has witnessed a proliferation in the development of new materials, practices and technologies available for use in elementary and secondary schools. The rapid pace at which these materials have been produced has made it difficult for those concerned with science education to carefully examine and evaluate alternatives. The Information Dissemination program provides opportunities for educational decision-makers such as administrators, subject matter specialists, teacher-leaders, school board members and other policymakers to make more informed choices. The scope of information dissemination activities may include curriculum

and instructional materials, research findings, concepts, processes and educational technologies pertinent to instruction in the sciences including social science and mathematics at the pre-college level. Activities will develop an awareness and demonstrate alternatives; they will also provide for discussion of design features, intended users, expected costs, advantages and disadvantages and other relevant information.

Projects are expected to be local or regional, rather than having a national orientation. In addition to making projects pertinent to local needs, a narrow geographic focus is more efficient and will encourage continuing communication between participants and the project staff.

ELIGIBLE INSTITUTIONS

Proposals may be submitted by non-profit organizations such as: colleges and universities, professional, scientific and educational associations or societies, research institutes and laboratories, and state education agencies. Proposals from school districts will also be considered when unique resources (e.g. experienced staff or equipment and materials of unusual diversity) are available to conduct the projects and where activities would not duplicate mechanisms of information dissemination already available. School districts should consult the Foundation program office before formalizing or submitting a proposal. School districts are encouraged to enter into associations with institutions of higher education in planning for information dissemination projects. Questions regarding eligibility may be referred to the program staff by writing to Information Dissemination for Science Education, Division of Science Education Resources Improvement, National Science Foundation, Washington, D.C. 20550, or by telephone at (202) 282-7950.

LIMITATIONS

The total amount of funds available to support information dissemination activities in Fiscal Year 1979 will be approximately $1,000,000. An individual proposal should not request support exceeding $30,000.

The deadline for receipt of proposals is January 10, 1979 and the anticipated announcement of awards is June 1979. It is recommended that the actual starting date for project activities be scheduled for August 15, 1979 or later. Project activities are to be completed by June 30, 1981.

PROJECT ACTIVITIES

The Foundation wishes to encourage a variety of information dissemination activities so that a broad spectrum of options will be available to education decisionmakers. An example of the activities which might be supported are information conferences structured along subject matter lines by grade level, such as a conference on methematics materials for use in elementary grades K-3, science materials for the junior high level or social science materials for grades 10-12. Similar activities could be built around available instructional technologies and pedagogical practices. Activities could also be proposed specifically for key state education department personnel or content supervisors from large cities.

Information exchange sessions similar to programs conducted in many local teachers' centers providing opportunities for information dissemination of considerable utility in classrooms will also be supported. In this type of activity, teachers having similar concerns periodically meet to discuss and exchange information on instructional materials and methods which they have found successful, and to seek advice related to classroom instruction. Consultant assistance, often provided by a faculty member from a nearby college or university, is available as a resource.

PROJECT CONTENT

The content of the information dissemination activities should be selected from the vast array of materials, practices, research findings and educational technologies currently available to assist instruction in science and mathematics.Those materials selected for inclusion in information dissemination projects should show clarity of purpose, scientific accuracy, educational soundness and desirability of anticipated outcomes. Evidence for acceptability should be documented in the proposal from such resources as journal articles, publishers reviews, evaluation and use studies, or other reliable sources of information dealing with educational products and research. The content of the projects should also reflect a balanced perspective of the available alternatives.

II. PREPARATION OF PROPOSAL

The proposal should describe explictly the information dissemination activities to be undertaken, how and when they will be accomplished and any other pertinent information which will help to evaluate the proposed project. Proposals should be concise and structured according to the format outlined in this brochure; they should not include bulky materials of limited relevance. These restrictions are necessary in order to make effective use of the time spent in the evaluation process.

The complete proposal should be prepared in the following order, the Cover Sheet, Table of Contents, Project Summary, Budget Section, Narrative Portion and optional Appendices. Although the Project Narrative is usually prepared first, the essential elements will be discussed in the order in which they appear in the completed proposal.

COVER SHEET

The Cover Sheet should be page 1 of the proposal and no other cover should be superimposed. A sample Cover Sheet is included at the end of this brochure as Appendix A. The Cover Sheet is used as the input for data processing, hence it should conform exactly to the sample shown in order and arrangement. While most categories are self-explanatory, the following points should serve to answer possible questions.

Project Descriptors

Under Item A, Target Audience, involvement of participants from such groups as school board members or organizations of parents should be indicated under the "others" category. It is anticipated that many information dissemination activities will be grouped by grade levels and science disciplines. In categorizing an activity by grade level or middle school mathematics materials, both the 4-6 and 7-9 boxes should be circled. The extent of the geographic region to be served should be defined as concisely as possible—Northern California, City of Chicago, New England States, etc.

Authorized Organizational Representative

The signature of the authorized official constitutes endorsement of the proposal and commitment to provide the specified support for the proposed activities in the event of a grant. This signature should be preceded by the typed name and followed by the typed title of this official.

TABLE OF CONTENTS

A Table of Contents should be prepared to facilitate review and evaluation of the proposal.

PROJECT SUMMARY

(See Appendix B).This summary should be a clear and simple abstract which accurately describes the proposed project within the space limitations of the form. The objectives and project design should be summarized but references to the budget should not be made.

SUMMARY PROPOSAL BUDGET

Institutions may request from the National Science Foundation: (1) direct operating costs of the project; (2) funds to help defray participant expenses; and (3) an allowance for indirect costs. The budget form is included as Appendix C in this brochure. This form will be used, in the event an award is made, as the official budget for the project. Under the column headed "Funds Requested by Proposer," list amounts requested from the NSF according to the major categories shown (senior personnel, other personnel, etc.). Other subcategories may appear within each major category and proposers may provide additional sheets if properly referenced to the Summary Proposal Budget Form. The second column entitled "Funds Granted by NSF" is for Foundation staff use only. All budget entries, referenced by letter as on the budget form, should be itemized and explained on the pages immediately following the budget. Some further discussion concerning the individual items follows.

A. Senior Personnel

Item 1. Director: One person should be designated as project director. The compensation budgeted for this person should reflect the size and complexity of the operation, and may provide a salary during the operating period. It may also include salary for administrative duties performed during the operational period of the proposed project.

Item 7. Faculty and other Senior Associates: Salaries budgeted for staff members associated with the project should correspond to their usual salaries for the time period involved; appropriate fractions of salary should be budgeted for those working only part-time on the project. Compensation for work performed by staff members (outside of their normal duties) during the summer months or other periods not included in the base salary period may be requested provided that the extra charges are determined for each staff member at a rate not in excess of the rate of the base salary.

B. **Other Personnel:** Compensation from grant funds for assistants and secretaries should be for services specifically rendered to the project and should be at rates prevailing for the host institution.

C. **Fringe Benefits:** An allotment may be requested to cover the employer's share of staff benefits such as retirement funds and social security, if these are charged as direct costs. These should be entered here with an explanation of the method of computation. Staff benefits requested must be in accordance with the usual accounting practices of the host institution. The institutional share of social security payments should be charged only for those payroll periods in which corresponding deductions are withheld from the employee.

D. **Equipment:** The Foundation defines equipment as having a minimal unit acquisition cost of $300 or more and an expected life of one year or more. If justified, proposers may request scientific equipment and general purpose equipment that is directly related to the project, i.e. A-V equipment, demonstration apparatus, etc. However, support may not be requested for office equipment, classroom furniture or similar items which are not specifically science-oriented or basic to educational activity. Items such as consumables, not meeting the criteria for equipment as defined by NSF, should be included in the budget under Materials and Supplies.

E. **Materials and Supplies:** The budget may include the cost of expendable supplies used in connection with the project. The costs of items such as stationery, duplicating material, brochures and application forms, postage stamps, and telephone calls attributable to the project may also be included here. The type of material and supplies required and estimated costs for these need be indicated in general terms only, unless the sum of the amounts requested for such uses exceeds 5 percent of the total direct operating cost, in which case an itemization and justification is required.

F. **Domestic Travel:** A 2-day meeting of project directors is tentatively scheduled for July 1979 in Washington, D.C. The budget should include an estimated amount to cover the travel and subsistence costs entailed by attendance at this meeting.

Costs of staff travel necessitated by site visits and participant consultation may also be requested. These costs should be based on the institution's usual allowances for transportation and subsistence for such travel. The basis for travel estimates should be detailed in the budget explanations.

J. **Consultant Services:** Honoraria for visiting lecturers should be reasonable, and consistent with honoraria normally paid by the host institution in programs supported by the institution's own funds. The budget explanations should give the number of days and the honorarium per day for each guest lecturer. Compensation in these instances is to be treated as a consultant's or lecturer's fee, rather than salary. Payment for a consultant's services may not exceed the daily equivalent of the maximum rate paid a US Government GS-18 (currently $182.72 per day).

K. **Participant Support Costs:** Reimbursements to individuals for expenses associated with participation in the project may be included in this category. *All requests for participant expenses must be fully itemized and justified in the budget explanations.* Involvement in activities requiring an extensive commit-

ment of time and/or dislocation from home may qualilfy individuals for allowances which reflect the actual cost—in terms of travel, food and lodgings—of participation. Since monies available for this purpose are limited, project directors are encouraged to make use of such facilities as dormitories and cafeterias to keep expenses at a minimum. Schools and school systems on the other hand, are encouraged to contribute toward the costs of travel and support for their personnel.

A travel allowance for commuting participants may be provided at a rate of up to 15¢ per mile, to cover a portion of the commuting costs. Alternatively, the project director may elect to provide a fixed allowance to cover a portion of the travel costs when urban public transportation is readily available. For participants in full-time residence, a travel allowance at a rate of up to 15¢ per mile may be provided to cover a portion of the cost of one round-trip by automobile from the participant's residence to the project site—or round-trip coach fare ticket by common carrier.

No provision is made for the payment of a stipend to participants for attendance at project activities.

M. Other Direct Costs: It is intended that the Foundation grant shall meet costs directly attributable to the project, but these must be itemized and justified. Among items not allowable are those relating to entertainment and any form of "contingency."

N. Indirect Costs: Each institution is entitled to receive indirect costs at the rate approved for that institution; where an Educational Service Rate has been established this rate should be used. Each proposal shall specify the institution's approved rate, and if different, the rate requested for the proposed activity. The approved rate and base for computation normally may be obtained either from the office of the administrative official who endorses proposals for the institution or from the business office. If the institution does not have a current indirect cost rate approved by a cognizant Federal negotiating agency, the business officer of the institution should contact the NSF's *Division of Grants and Contracts Indirect Cost Office*, telephone (202) 634-7545.

Other Budget Information: The Foundation considers tuition and all fees relating to instruction to be reimbursement to the institution for operating costs. Hence, the Foundation will not pay tuition and such fees in addition to operating cost nor may individuals who are participating in a Foundation-supported project be required to pay tuition, registration, credit or other fees relevant to instructional costs. If, for legal or other reasons which have been delineated in the budget explanations, the institution must account for a part of its receipts as tuition and fees, these may be listed in the budget explanations but may not, as indicated above, be charged to participants.

Budget Explanation Sheets: A brief section should follow the Summary Proposal Budget and justify the level of budgetary support requested. category by category.

NARRATIVE

The narrative portion of the proposal constitutes the principal basis for judging the merits of the proposed project. The proposal review criteria on page 10 should be considered while preparing this segment of the proposal. The information requested should be presented clearly and concisely. This portion of the proposal should be limited to twenty (20) double-spaced typed pages.

Needs

This section should state the needs to which the project is directed and provide information on how these needs were determined. The specific instructional materials, practices, research findings or educational technologies, which will form the basis of the information to be disseminated, should be adequately described. Since this program is primarily concerned with the presentation of information to decision-makers on a range of alternatives, it is imperative that a balanced view be presented. In dealing in the proposal with instructional materials about which information will be provided, evidence should be presented in response to the following concerns:

- that the materials possess a clear purpose and rationale
- that the content of the materials is scientifically accurate

- that the materials are educationally sound
- that the anticipated outcomes of the use of the materials are desirable.
- that the costs of using the materials are reasonable.

One of the criteria which proposal reviewers will be asked to rate in their evaluation deals with the adequacy of the evidence presented in response to the above concerns. This difficult problem may be addressed with citations from journal articles, publishers reviews, evaluation and use studies, or other sources of information dealing with education products. The proposal should also indicate that issues dealing with instructional materials such as design features, intended users, expected costs, implementation problems, and advantages and disadvantages will be discussed during the projects.

Purpose

It is essential that the section on purpose include a precise description of what is to be accomplished during the period of support.

Project Design

This section must be sufficiently detailed to enable those evaluating the proposal to judge whether the project plan is appropriate. Any unusual or innovative features should be adequately explained. The proposal should make clear how the activities will achieve the project objectives. The project design-description should include the following information:

1. A calendar, including dates, location and brief descriptions, for major project activities;
2. The characteristics and numbers of the expected participant audience;
3. The procedures which the project director will use to publicize the project, to solicit applications and to select participants should be detailed. (Each project director is responsible for publicizing the program and generating a sufficient pool of participant applications);
4. Sample schedules indicating how participants' time will be allocated. The schedule should be sufficiently diversified so as to ensure that the pace of the project is varied, and that an allowance has been made for different levels of experiences of participants. Proposals will be expected to demonstrate that appropriate measures have been taken to ensure that the rationale of the program has been made clear to all participants and that its overall design is responsive to participant perceptions of the project);
5. If there are plans for continuation of the project beyond the cycle of activity described in detail in the proposal, a realistic statement of such future plans should be included. These plans should relate the activities of the present proposal to future proposals which may be submitted for continuation of the activity. Anticipated future requests for support should be given for each year. The role of the participants, receiving information through the projects, to disseminate this information to other audiences of concerned educators should also be detailed.

Personnel, Facilities and Management Procedures

Project staff members should be identified and contacted regarding their willingness to be included in the proposal prior to its submission. In addition to naming the staff, the proposal should describe the responsibilities of each staff member. In addition to college level personnel, projects may use as staff members experienced school personnel competent in their discipline who are well acquainted with the philosophy, rationale and content of the materials being presented. All staff should possess qualifications related to the objectives of the project. The Foundation requires the project staff to exhibit the full range of backgrounds, both disciplinary and pedagogical, needed to conduct the project. In attempting to assess staff capabilities, attention should be focused on those qualifications that seem crucial for the particular task. In general, a strong proposal will establish that the participating staff has made a commitment to pre-college science education that is likely to extend beyond the immediate project being proposed. Pertinent qualifications, such as recent experience with school science projects, present position, and degrees held should be included.

This section should also include the information on research and science education activities discussed in Section III under Information

Regarding NSF Applicants' Current Science Education and Research Activities. Vitae and other more lengthy materials should be left to the Appendix.

The appropriateness and competence of the submitting institution to undertake the project, as evidenced by current staff ad facilities, as well as by past experience, should be summarized.

Evaluation

The Foundation expects that effective proposals will include plans for evaluation to determine whether or not the specific objectives of the project have been achieved. The plan would also normally include strategies for gathering information to assist project directors in improving their projects in the future.

APPENDICES

Material that is supplementary to the text of the proposal may be included in appendices. Institutional catalogs, departmental curricula or other general material should NOT be included. Each appendix should be tabbed or prepared in some manner as to make it easily distinguishable from the body of the proposal.

III. OTHER CONSIDERATIONS IN SUBMITTING PROPOSALS

ASSURANCE OF COMPLIANCE WITH THE CIVIL RIGHTS ACT

If the applicant's institution has not filed an Assurance of Compliance with Title VI of the Civil Rights Act of 1964, as required by NSF regulations, pertinent forms and a copy of the regulations may be obtained by writing to the Foundation's Division of Grants and Contracts. The required Assurance Form, when completed by the institution, should be submitted to the Division of Grants and Contracts. Once an Assurance Form has been submitted by the applicant organization it covers all proposals subsequently submitted by any department or other unit of that organization. Individual Assurance Forms are not necessary for each application or for each proposal. If there is any question about whether or not an institution has filed an Assurance of Compliance, the institution's business office should be consulted.

In the case of consortia and other types of projects designed to benefit several organizations as cooperating participants in the grant activity, the grantee must receive from the cooperating colleges, universities, or other subrecipients an Assurance of Compliance with Title VI of the Civil Rights Act of 1964 or written notification that such Assurance of Compliance has been previously filed with the U.S. Department of Health, Education and Welfare or with the Foundation. Copies of the Assurance of Compliance Form to be used by the subrecipient will be supplied by the Foundation's Division of Grants and Contracts upon request. Completed forms or written notification are to be retained by the grantee for the life of the grant. They may be disposed of thereafter in accordance with the grantee's standard policy for record retirement or destruction.

In accordance with established Foundation policy and in furtherance of the provisions of the Civil Rights Act of 1964, the Foundation requires that local brochures and other general publicity designed to attract applicants to, and inform them about, the project contain the following statement:

> "In the operation of the project and in selecting individuals for participation in, and administration of, the project (name of institution) will not discriminate against any person on the ground of race, creed, color, sex, age, or national origin."

INFORMATION REGARDING NSF APPLICANTS' CURRENT SCIENCE EDUCATION AND RESEARCH ACTIVITIES

Each proposal must list all current projects, in addition to the proposed project, to which the senior personnel have committed a portion of their time whether or not salary for the person involved is included in the budgets of the various projects. This information should include the titles and dates of current grants or contracts, the

sources of funds, annual budget levels, and the man-months devoted to each project by each of the senior personnel. The proposal must also provide analogous information for *all* other *proposed* projects which are being considered by, or which will be submitted in the near future to, other possible sponsors including other Foundation programs. Concurrent submission of any proposal to other organizations will not prejudice its review by the Foundation.

CONFIDENTIAL ASPECTS OF PROPOSALS AND AWARDS

When a proposal results in a grant it becomes a part of the record of the Foundation's transactions, available to the public upon specific request. Information which the Foundation and the grantee mutually agree to be of a privileged nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have the Foundation consider as privileged should be clearly marked as such and sent in a separate statement, two copies of which should accompany the proposal.

A proposal that does not result in a grant may be retained by the Foundation. Such a proposal will be released only: (1) with the consent of the proposer; or (2) to the extent required by law. A proposal may be withdrawn at any time prior to final action thereon by the Foundation.

GRANTEE MANAGEMENT AND ORGANIZATION DATA

If your institution has not received an NSF grant within the past 2 years, please fill out the Applicant Management and Organization Information Card on the back of the brochure and attach it to the original copy of the proposal.

SPECIAL NSF REQUIREMENTS INVOLVING EQUIPMENT

If a proposal for NSF support involves the purchase or lease of special purpose equipment, having a unit acquisition cost exceeding $10,000, it must contain a certification by the authorized organizational representative that the equipment is (a) essential and not reasonably available and accessible to the project and, if funded by NSF, will be subject to (b) reasonable inventory controls and maintenance procedures and (c) organizational policies designed to enhance multiple or shared use on other projects, if such other use will not interfere with the work on the project for which the equipment is being acquired.

Because of the lead time involved, it may not be practical for an institution to make this certification at the time of the initial proposal submission. In such cases, the NSF will accept a statement to that effect in the proposal with the understanding that the certification will be supplied before a grant is made.

IV. PROPOSAL SUBMISSION

STATEMENT OF INTENT TO SUBMIT

To insure adequate planning for review of proposals, potential proposers are requested to complete and return the Intent-to-Submit card attached on the inside back cover of this announcement. *This should be done when personnel are first committed to write the proposal.* Sending, or failing to send this card does not commit an institution or the Foundation to any course of action, and the failure to send the card will not exclude an institution's proposal from competition, but it does assist the Foundation in planning for an orderly review process. This card should be submitted before December 1, 1978.

DIRECTIONS FOR SUBMISSION OF PROPOSALS

1. Fifteen (15) copies of the complete proposal, plus five (5) additional copies of the Cover Sheet are required.
2. The Narrative section of the proposal may not exceed twenty (20) double-spaced, non-reduced pages, printed on one side only on standard (not legal) size paper.
3. Appendices, not to exceed fifteen (15) pages, may accompany the proposal.
4. Pages should be numbered at the bottom center.
5. The Cover Sheet is the letter of transmittal. Institutional letters of endorsement or transmittal, supporting letters, institutional forms, etc., if included, must be appended to the proposal. When placed over the Cover Sheet they delay processing and increase the chances for error.
6. Proposals are to be assembled in the order shown on pages 5-7, and should be stapled in the upper left hand corner.
7. Proposals should be transmitted in a single, secure package.
8. Mail to:

   Central Processing Section for
   Information Dissemination for
   Science Education
   National Science Foundation
   Washington, D.C. 20550

   Hand delivered copies should be taken to Room 223, 1800 G Street, NW, Washington, D.C.
9. To facilitate prompt acknowledgment of the arrival of the package at its destination, the project director should cut out the two postcards on the back cover of this guide, fill them in to identify the proposal, self-address one card, and address the other to the official authorized to sign the Cover Sheet of the signature copy. When the package arrives, the date will be acknowledged and an assigned proposal number will be entered on the cards before they are returned, so that the proposer and the Foundation can refer to this number in all future correspondence about the proposal. If an acknowledgment card with the proposal number endorsed upon it is not received within two weeks of submission, the program staff should be contacted.

SCHEDULE

Proposals must be received in the Foundation by close of business Wednesday, January 10, 1979 to insure inclusion in the competitive review process established for this program.

Final decisions will be announced in June 1979. No information about the status of any proposal can be provided prior to the award date.

ACCESS TO PROPOSAL REVIEW INFORMATION

After final decisions have been announced, the Foundation will, upon request, inform the project director of the reasons for its decision on a proposal. Verbatim copies of reviews, excluding the identity of the reviewer, will be made available to project directors if such is specifically requested in writing.

V. PROPOSAL EVALUATION

PROCEDURE

In selecting Information Dissemination proposals to be supported, the National Science Foundation seeks the advice of panels of scientists, educators and others concerned with science education. Recommendations of these panels constitute a major element in the Foundation's determination of whether a grant shall be made. The final decision on proposals to be supported is made by the Foundation staff on the basis of merit to the extent of available resources except that, in cases of substantially equal merit, consideration may be given to such additional factors as geographic distribution, school grade levels, content areas and impact on urban school districts.

REVIEW CRITERIA

Reviewers will be asked to judge proposals on each of the four major criterion categories listed below. Panelists are requested to base their conclusions and recommendations on information contained in the proposal. Each criterion category will be given equal weight.

1. Needs and Purpose

Several concerns are included here. The first regards the content to be disseminated. Evidence must be presented in the proposal that:

- the materials possess a clear purpose and rationale
- the materials are scientifically accurate and educationally sound
- the anticipated outcomes of the use of the materials are desirable.

Second, the proposal should provide evidence regarding the importance of disseminating the information.
Third, project objectives should be clear and consistent both with the need or problem being addressed and the goals of the National Science Foundation Information Dissemination Program.

2. Methodology

- the proposer should demonstrate knowledge and understanding of other dissemination efforts and the relationship of those efforts to the proposed project.
- the conceptualization of the problem and proposed project design should indicate imagination and creativity.
- media channels should be used which are likely to reach the appropriate audiences.
- the media channels chosen should be cost-effective.

3. Personnel, Facilities and Management Procedures

Within this category the qualifications of the project director, key staff and consultants is a primary concern:

- staff should possess pertinent skills and relevant experience.
- staff should reflect a balance of scientists, science educators and dissemination experts necessary for adequate staffing of the project.
- the proposed time commitment by staff members should be adequate to accomplish the project's objectives.
- facilities should be available and appropriate to the dissemination needs.
- management procedures for tying together staff and facilities into a functioning unit should be adequate.

4. Potential Impact

This category provides an overall assessment of the project. What is the likelihood that the dissemination effort will succeed and make an important contribution to knowledge about teaching, learning, instructional materials, educational resource allocation, or policy in science education? Have appropriate procedures been identified in the proposal to measure project success?

VI. PROJECT AND AWARD MANAGEMENT

GRANT ADMINISTRATION

Grants will be administered in accordance with the terms and conditions of the award instrument.

An NSF grant is normally made to an organization, known as the grantee, rather than to the individual principal investigator or project director who proposed to conduct the project. Notification of an award is made by letter signed by the NSF grants officer. The grant establishes a relationship between NSF and the grantee in which:

- NSF agrees to provide financial support for the project to be performed under the provisions of the grant instrument.
- The grantee agrees to the performance of the project, to the prudent management of the funds provided by the grant and to the provisions of the grant instrument.

The grantee is free to accept or reject the grant. Normally, the action to obtain Federal funds constitutes acceptance of a grant once it is made. However, in some cases, NSF may require written acceptance.

All written inquiries of a programmatic or technical nature should be directed to the Information Dissemination for Science Education Program, Division of Science Education Resources Improvement, National Science Foundation, Washington, D.C. 20550. Inquiries about other matters should be directed to the Foundation's Division of Grants and Contracts at the same address. Personal visits to the program staff may be made to Room W-424, 5225 Wisconsin Avenue, N.W., Washington, D.C. or telephone calls directed to (202) 282-7950. *(Correspondence should not be sent to the Wisconsin Avenue address.)*

NSF GRANT LETTER

The grant letter, signed by the NSF Grants Officer, constitutes official notification of Foundation support. The grant letter is addressed to the appropriate official of the grantee institution with copies to the project director and the business officer of the institution.

Incorporated into the grant letter is the approved budget and other grant conditions. The grant provides authority to the grantee to commit funds for support of the project at any time between the effective date of the grant and the expiration date of the grant.

The grant period extends from the effective date of the award through the expiration date and is that span of time during which the objectives of the project are to be achieved and the grant funds are available for appropriate obligation. This period intentionally is longer than the duration of the project in order to allow time for preparation of reports after the project is concluded. The grant becomes effective on the date specified in the grant letter and expires on the date given in that letter. It is required that all commitments of grant funds be made during the grant period.

ROLE OF THE PROJECT DIRECTOR

It is expected that the project director will represent the grantee institution in its dealings with the Foundation on substantive matters relating to the grant. The director is responsible for all aspects of the day-to-day administration of the project—for insuring that funds are expended for purposes and at rates specified in the grant instrument, for providing guidance to other project personnel, for continually reevaluating project plans and results, with a view toward determining if and when unforeseen developments require minor or major changs, for providing liaison with the Foundation, and for preparing and submitting required reports (other than fiscal reports) on a timely basis. The selection of participants is the responsibility of the project director.

Since the project director bears primary responsibility for the success of the project, the incumbent should be replaced only for substantial reasons. When it appears that such a change is necessary, the administrative head of the institution, or an official authorized to sign for the administrative head, shall write the Foundation, setting forth the reasons requiring the change, the name of the person being nominated and a brief vita showing his or her qualifications

for conducting this project. No change in the project director shall be effective without written confirmation from the Foundation.

Where appropriate, the project director should prepare a brochure or leaflet describing the project. This publication serves to provide information in answer to inquiries, and may be given general circulation in the area to be served by the institution's program. Such a brochure should outline clearly and completely the activities and aims of the project, list potential staff, provide policies on academic or other credit, and give the deadline date for the receipt of applications. Any special features or objectives of the program should be fully described. A well designed brochure will help considerably in encouraging applications from those for whom the project is intended; it will also eliminate the need for some correspondence with individuals seeking information about the project. If a brochure is prepared, three copies should be sent to the Information Dissemination Program.

CREDIT

The Foundation has no policy regarding the awarding of academic or in-service credit. The availability of credit should depend on local circumstances, the combination of project variables involved, and the role of credit in motivating participation.

CHANGES IN PROJECT OPERATION

Changes in the conduct of the project may be proposed at any time. Although the grant budget provides an itemization of operating costs, the project director is permitted to make such transfers among items within the operating costs as deemed necessary to effective project operation, to the extent that they are consistent with NSF policy as stated elsewhere in this Guide or in the grant instrument.

Funds allocated for participant support costs may NOT be used to cover operating costs.

Written Foundation approval is required for any permanent change in the project director or any temporary change in excess of three months. Further, NSF must be informed when it appears that the project director will devote substantially less effort to the work than anticipated in the approved proposal.

TIME EXTENSIONS

When circumstances delay the work, a no-cost extension may be requested. This request, along with a justification, must be received at the Foundation at least 45 days before the award expiration date, contain the signatures of both the project director and the authorized institutional representative, and include a summary of progress, a budget for use of the remaining funds and plans to complete the project.

PROJECT MONITORING AND EVALUATION

The NSF uses a variety of techniques to monitor and evaluate project progress and outcomes. Site visits may be made by NSF staff or consultants. Proposers should be aware that the Foundation may, as a part of its own program evaluation activities, carry out in-depth evaluations of selected awarded projects through independent third parties. Thus, proposers should be prepared to cooperate with evaluators eventually retained by the Foundation to analyze both the conduct and the impact of any supported project.

REPORTS

Information Dissemination grantees will receive further instructions to be distributed and discussed at a Project Director's meeting to be held in July 1979, which will include among others, the reporting procedures to the Foundation. The general requirements for submission of a final project report are provided in NSF Important Notice No. 73 to Presidents of Universities and Colleges and Heads of Other NSF Grantee Organizations. (See Appendix D). Where grant activities extend more than 12 months in duration, the Foundation staff may request additional interim reports.

1. Two copies of the Final Project Report (NSF Form 98A, revised May 1978) are to be submitted by the Project Director within 90 days after expiration of the award to:

   National Science Foundation
   Division of Grants and Contracts
   Award Accountability Branch
   Washington, D.C. 20550

   The purpose of a final report is two-fold. It provides for the record a factual account of

the project, and it also proivdes an opportunity for an assessment of the effectiveness of the activity and of the NSF program through which the project was supported.

2. There is no standard form for the technical description of the project and results (Form 98A, III), but a narrative account is preferred. It should repeat, if necessary, pertinent material from earlier director's reports. It should be typed on standard size (8" x 10½" or 8½" x 11") paper, unbound, but stapled in the upper left hand corner.

   The technical information should be submitted directly to the IDSE program staff within 90 days after the expiration of the award. The report should provide information on the number of project participants by role classification—e.g., elementary principal, science supervisor, high school mathematics department head, etc. The narrative account should provide a brief description of project activities particularly those changes which have evolved as the project developed. Problems encountered in the operation of the project should be mentioned along with information on solutions. Results of evaluation to determine the extent to which the objectives of the project have been achieved should be summarized. Suggestions for the improvement of this or other similar projects in the future should be provided. And lastly, the National Science Foundation would be interested in your suggestions for the improvement of the Information Dissemination for Science Education (IDSE) program.

3. Final expenditure information, also required for each completed grant, is provided through the quarterly Federal Cash Transactions Report (FCTR, formerly known as the Quarterly Expenditures Report). The Foundation's computerized version of FCTR is forwarded to the fiscal officer of each grantee institution by the Foundation's Division of Financial and Administrative Management (DFA) in the month following the close of each calendar quarter. Procedures for reporting are sent to grantees at the time an award is made. Completed Federal Cash Transactions Reports are returned to:

   Division of Financial and
   Administrative Management
   National Science Foundation
   Washington, D.C. 20550

PUBLICATIONS

Acknowledgment

An acknowledgment of NSF support must be made in connection with the publication of any material based on or developed under a project supported by NSF to the effect that: "This (material) was prepared with the support of National Science Foundation Grant No. 00.

Disclaimer

Any materials, books, monographs, proceedings of symposia, or similar publications supported by an NSF grant must contain a statement, immediately following the acknowledgment, that contains an expression of the following: "Any opinions, findings, conclusions or recommendations expressed (herein) are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

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PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

DIRECTORATE FOR SCIENCE EDUCATION

Cover Page

FOR CONSIDERATION BY NSF ORGANIZATIONAL UNIT (please specify):

INFORMATION DISSEMINATION FOR SCIENCE EDUCATION (IDSE)

PROGRAM ANNOUNCEMENT/SOLICITATION NO.: SE 79-33	CLOSING DATE: JANUARY 10, 1979

NAME OF SUBMITTING ORGANIZATION TO WHOM AWARD SHOULD BE MADE (INCLUDE BRANCH/CAMPUS/OTHER COMPONENTS)

ADDRESS OR ORGANIZATION (INCLUDE ZIP CODE)

TITLE OF PROPOSED PROJECT

AMOUNT REQUESTED FROM NSF	PERIOD OF PROJECT OPERATION:
$	STARTING DATE: ENDING DATE:

DIRECTORS NAME AND SOCIAL SECURITY NO. (SSN)* (Dr., Prof., Mr., Ms.)

_____ SSN _____

PHONE NO.
HOME:* ( ) _____
OFFICE: ( ) _____

DIRECTOR'S DEPARTMENT	DIRECTOR'S ORGANIZATION IF DIFFERENT FROM SUBMITTING ORGANIZATION

ARE ANY FUNDS FOR THE PROJECT PROPOSED HEREIN BEING REQUESTED IN ANOTHER PROPOSAL TO NSF OR ANOTHER FEDERAL AGENCY? _____ IF YES, INDICATE NSF PROGRAM OR AGENCY; PROPOSAL NUMBER(S), DATE SUBMITTED:

PROJECT DESCRIPTORS:

A. Target Audience (enter number of participants anticipated), by category and total.

_____ Superintendents/Principals
_____ Subject Matter Specialists
_____ Secondary Teachers (7-12)
_____ Elementary Teachers (K-6)
_____ Others (Specify)
TOTAL _____

B. Grade level for which the information dissemination activity is proposed, (circle as many as appropriate).

K-3 4-6 7-9 10-12 OTHER EXPLAIN _____

C. Disciplines involved in Project (circle as many as appropriate)

Natural Science Mathematics Social Science OTHER EXPLAIN _____

D. Geographic Target Area of Activity: _____

* Submission of SSN and other personal data is voluntary and will not affect the organization's eligibility for an award. However, they are an integral part of the NSF information system and assist in processing proposals. SSN solicited under NSF Act of 1950, as amended.

PRINCIPAL INVESTIGATOR/ PROJECT DIRECTOR	AUTHORIZED ORGANIZATIONAL REP.	OTHER ENDORSEMENT (optional)
NAME (Dr.; Prof.; Mr.; Ms.)	NAME (Dr.; Prof.; Mr.; Ms.)	NAME (Dr.; Prof.; Mr.; Ms.)
SIGNATURE	SIGNATURE	SIGNATURE
TITLE	TITLE	TITLE
DATE	DATE	DATE

APPENDIX B

NOTICE OF RESEARCH PROJECT
SCIENCE INFORMATION EXCHANGE

SMITHSONIAN INSTITUTION
NATIONAL SCIENCE FOUNDATION
PROJECT SUMMARY

PROJECT NO. (Do not use this space)
NSF AWARD NO.

1. NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS & SCHOOL OR DIVISION)
2. MAILING ADDRESS
3. PRINCIPAL INVESTIGATOR AND FIELD OF SCIENCE/SPECIALTY
4. TITLE OF PROJECT
5. SUMMARY OF PROPOSED WORK (LIMIT TO 22 PICA OR 18 ELITE TYPEWRITTEN LINES)

FOR NSF USE ONLY

DIVISION (OFFICE) AND DIRECTORATE	PROGRAM	
SECTION	PROPOSAL NO.	F.Y.

FOR DGC USE ONLY

START AND END DATES	AMOUNT GRANTED

NSF FORM 4 (7-78)

1. Proposal Folder
2. Program Suspense
3. Division of Grants & Contracts
4. Science Information Exchange
5. Principal Investigator
6. Off. of Govt. & Pub. Progs.
7. Assistant Director

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APPENDIX C

SUMMARY PROPOSAL BUDGET

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ORGANIZATION AND ADDRESS	FOR NSF USE ONLY PROPOSAL NO.
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR	DURATION (MONTHS) PROPOSED / REVISED

NSF USE		NSF FUNDED MAN MONTHS CAL.	ACAD.	SUMR.	FUNDS REQUESTED BY PROPOSER	FUNDS GRANTED BY NSF (IF DIFFERENT)
	A. SENIOR PERSONNEL (LIST BY NAME; SHOW NUMBERS OF PEOPLE IN BRACKETS; SALARY AMOUNTS MAY BE LISTED ON SEPARATE SCHEDULE) GPM 205.1b					
	1. P.I./P.D.				$	$
	2. CO P.I./P.D.				$	$
	3. CO P.I./P.D.				$	$
	4. CO P.I./P.D.				$	$
	5. CO P.I./P.D.				$	$
11115	6. ( ) ← SUBTOTALS A1 - A5 →				$	$
	FACULTY AND OTHER SENIOR ASSOCIATES (ATTACH EXTRA SHEET IF NECESSARY)					
	7.				$	$
	8.				$	$
	9.				$	$
	10.				$	$
	11.				$	$
11117	12. ( ) ← SUBTOTALS A7 - A11 →				$	$
	B. OTHER PERSONNEL (LIST NUMBERS IN BRACKETS)					
11141	1. ( ) POSTDOCTORAL ASSOCIATES				$	$
11149	2. ( ) OTHER PROFESSIONALS				$	$
11150	3. ( ) GRADUATE STUDENTS				$	$
11152	4. ( ) UNDERGRADUATE STUDENTS				$	$
11182	5. ( ) SECRETARIAL - CLERICAL				$	$
11183	6. ( ) TECHNICAL, SHOP, OTHER				$	$
	TOTAL SALARIES AND WAGES (A+B)				$	$
11200	C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				$	$
	TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C)				$	$
	D. EQUIPMENT (LIST ITEMS AND DOLLAR AMOUNTS FOR EACH ITEM)					
23181	TOTAL EQUIPMENT				$	$
	E. MATERIALS AND SUPPLIES					
32630					$	$
	F. DOMESTIC TRAVEL					
42111					$	$
	G. FOREIGN TRAVEL (LIST DESTINATION AND AMOUNT FOR EACH TRIP; GPM 731)					
42112					$	$

PAGE 1 OF 2 PAGES

SUMMARY PROPOSAL BUDGET

PROPOSAL NO.

52500	H. PUBLICATION COSTS/PAGE CHARGES	$	$
62315	I. COMPUTER (ADPE) SERVICES	$	$
	J. CONSULTANT SERVICES (IDENTIFY CONSULTANTS BY NAME AND AMOUNT; GPM 516)		
		$	$
	K. PARTICIPANT SUPPORT COSTS, IF ALLOWED BY PROGRAM GUIDE (ITEMIZE) GPM 518		
	1. STIPENDS $		
	2. TRAVEL $		
	3. SUBSISTENCE $		
	4. OTHER - SPECIFY $		
	5. TOTAL PARTICIPANT COSTS (K1 + K2 + K3 + K4)	$	$
	L. ALL OTHER DIRECT COSTS (List items and dollar amounts. Details of subcontracts, including work statements and budget, should be explained in full in proposal.)		
	$		
	$		
	$		
	$		
65001	TOTAL OTHER DIRECT COSTS	$	$
	M. TOTAL DIRECT COSTS (A THROUGH L)	$	$
	N. INDIRECT COSTS (Specify rate(s) and base(s) for on/off campus activity. Where both are involved, identify itemized costs included in on/off campus bases in remarks.)		
74100	TOTAL INDIRECT COSTS	$	$
	O. TOTAL DIRECT AND INDIRECT COSTS (M + N)	$	$
74500	P. LESS RESIDUAL FUNDS (If for further support of current project; GPM 252 and 253)	$	$
75000	Q. AMOUNT OF THIS REQUEST (O MINUS P)	$	$

REMARKS

NOTE: SIGNATURES REQUIRED ONLY FOR REVISED BUDGET (GPM 233). THIS IS REVISION NO.

SIGNATURE OF PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR	DATE OF SIGNATURE	TYPED OR PRINTED NAME AND TITLE
SIGNATURE OF AUTHORIZED ORGANIZATIONAL REPRESENTATIVE	DATE OF SIGNATURE	TYPED OR PRINTED NAME AND TITLE

FOR NSF USE ONLY

INDIRECT COST RATE VERIFICATION			PROGRAM OFFICER APPROVAL
Date Checked	Date of Rate Sheet	Signature	

Grant Number	Amend No.	Institution	Organization	Fund Acct.	Program	Object	

	Proposal Number	Dur.	Chg.	Award Date	Proposed Amount	Prpsd. Dur.	

PAGE 2 OF 2 PAGES

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NATIONAL SCIENCE FOUNDATION
Office of the Director
Washington, D.C. 20550

Notice No. 73 May 8, 1978

IMPORTANT NOTICE TO PRESIDENTS OF UNIVERSITIES AND COLLEGES AND HEADS OF OTHER NATIONAL SCIENCE FOUNDATION GRANTEE ORGANIZATIONS

Subject: **Further Simplification of NSF Reporting Requirements and Enforcement of these Requirements**

For some time, the National Science Foundation has required three reports for all completed grants: a Financial Status Report; a Summary of Completed Project; and a Final Technical Report. In 1977, the Foundation announced a proposed simplification of final fiscal reporting through the use of NSF's computerized Federal Cash Transactions Report which is distributed quarterly for completion by grantees. I am pleased to note that the new reporting system received very favorable comments from grantees. It has just been implemented with the FCTR for the period ending March 31, 1978 and individual Financial Status Report forms are no longer required.

A final technical report has been a long-standing requirement for NSF awards. It contains the scientific information needed by NSF program managers to monitor the results of projects within their areas of responsibility. The Summary of Completed Project was introduced in 1976 as a mechanism for informing the Congress and the general public about the results of NSF-funded research. In addition to being supplied to the Congress and the public in response to requests for information, the abstracts are published annually.

Along with our review of fiscal reporting in 1977, we initiated a review of the data elements required by NSF in the Summary of Completed Project and the final technical report with a view to simplifying these requirements as well. The review indicated that some of the information required in the two reports is identical or similar. Accordingly, we have now redesigned the formats of these reports to combine the common elements into a single form. Copies of the new format and the associated instructions are attached for local reproduction and immediate use. Along with a reduction in duplicate reporting elements, the new form recognizes the fact that some information may not be available at the same time the report is due. The form provides blocks for the principal investigator to check to indicate the submission status of these items.

With this change, the Foundation considers it has reduced its reporting requirements to an absolute minimum consistent with adequate accountability for the use of public funds. We have tried to make the reporting as simple and convenient as possible. Principal Investigators and grantee institutions have an obligation to carry out these requirements in a timely and careful manner. Overdue reports not only raise questions about accountability, but divert resources from productive activities to expensive followup activities.

NSF will require compliance with these simplified reporting requirements; final fiscal information through submission of the FCTR; information on project results through submission of the Final Project Report. In addition to telephone calls, reminder correspondence, and visits by NSF staff to review grantee recordkeeping problems, the Division of Grants and Contracts will monitor overdue report submissions to assure that these two requirements have been fulfilled on prior, expired awards before new awards are made.

Some NSF awards contain requirements for unique reports or other end products. Special provisions for such requirements are included in the award instrument. Nothing in this Notice should be construed as waiving such provisions.

Finally, the Foundation appreciates the comments and suggestions for additional paperwork improvements in response to Important Notice No. 65. Some of these suggestions have been adopted and will be reflected in future editions of NSF program brochures and the Grant Policy Manual.

Richard Atkinson

Richard C. Atkinson
Director

Attachments

NATIONAL SCIENCE FOUNDATION
Washington, D.C. 20550

FINAL PROJECT REPORT
NSF FORM 98A

PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING

PART I–PROJECT IDENTIFICATION INFORMATION

1. Institution and Address	2. NSF Program	3. NSF Award Number
	4. Award Period From To	5. Cumulative Award Amount

6. Project Title

PART II–SUMMARY OF COMPLETED PROJECT *(FOR PUBLIC USE)*

PART III–TECHNICAL INFORMATION *(FOR PROGRAM MANAGEMENT USES)*

1. ITEM *(Check appropriate blocks)*	NONE	ATTACHED	PREVIOUSLY FURNISHED	TO BE FURNISHED SEPARATELY TO PROGRAM	
				Check (√)	Approx. Date
a. Abstracts of Theses					
b. Publication Citations					
c. Data on Scientific Collaborators					
d. Information on Inventions					
e. Technical Description of Project and Results					
f. Other *(specify)*					

2. Principal Investigator/Project Director Name *(Typed)*	3. Principal Investigator/Project Director Signature	4. Date

NSF Form 98A (5-78) Supersedes All Previous Editions

Form Approved OMB No. 99R0013

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INSTRUCTIONS FOR FINAL PROJECT REPORT
(NSF FORM 98A)

This report is due within 90 days after the expiration of the award. It should be submitted in two copies to:

National Science Foundation
Division of Grants and Contracts
Post-Award Projects Branch
1800 G Street, N.W.
Washington, D.C. 20550

INSTRUCTIONS FOR PART I

These identifying data items should be the same as on the award documents.

INSTRUCTIONS FOR PART II

The summary (about 200 words) must be self-contained and intelligible to a scientifically literate reader. Without restating the project title, it should begin with a topic sentence stating the project's major thesis. The summary should include, if pertinent to the project being described, the following items:

- The primary objectives and scope of the project.
- The techniques or approaches used only to the degree necessary for comprehension.
- The findings and implications stated as concisely and informatively as possible.

This summary will be published in an annual NSF report. Authors should also be aware that the summary may be used to answer inquiries by nonscientists as to the nature and significance of the research. Scientific jargon and abbreviations should be avoided.

INSTRUCTIONS FOR PART III

Items in Part III may, but need not, be submitted with this Final Project Report. Place a check mark in the appropriate block next to each item to indicate the status of your submission.

a. Self-explanatory.
b. For publications (published and planned) include title, journal or other reference, date, and authors. Provide two copies of any reprints as they become available.
c. Scientific Collaborators: provide a list of co-investigators, research assistants and others associated with the project. Include title or status, e.g. associate professor, graduate student, etc.
d. Briefly describe any inventions which resulted from the project and the status of pending patent applications, if any.
e. Provide a technical summary of the activities and results. The information supplied in proposals for further support, updated as necessary, may be used to fulfill this requirement.
f. Include any additional material, either specifically required in the award instrument (e.g. special technical reports or products such as films, books, studies) or which you consider would be useful to the Foundation.